

13:30:23 ON 02 SEP 2010 14:04:47 ON 02 SEP 2010

FILE 'HCAPLUS' ENTERED AT 13:30:31 ON 02 SEP 2010 1 SEA ABB=ON US20070051941 /PN Ll D ALL

FILE 'WPIX' ENTERED AT 13:33:26 ON 02 SEP 2010 1 SEA ABB=ON US20070051941 /PN 1.2 SEL L2 1- MC : 5 TERMS 25905 SEA ABB=ON L3 1.4

FILE 'HCAPLUS, WPIX, JAPIO' ENTERED AT 13:34:33 ON 02 SEP 2010 76832 SEA ABB=ON (NANOTUBES(L) CARBON) L6 90793 SEA ABB=ON (CARBON OR C) (3A) (NANOTUB? OR NANOFIB##### OR NANONEEDL? OR NANOROPE OR NANO ROPE OR NANOBUNDLE OR NANO BUNDLE OR NANOTHREAD OR NANOYARN OR NANO THREAD OR NANO YARN OR NANOBRISTLE OR NANO BRISTLE OR NANORIBBON OR NANO RIBBON OR NANOCYCLIND? OR NANO CYCLIND?) 45317 SEA ABB=ON (DWINT OR CINT OR MWCNT OR SWCNT OR SWINT OR MWINT OR (SINGLE WALL### OR MULTI WALL### OR MULTIWALL###) (2A) NANOTUB?) L8 41057 SEA ABB=ON (NANOSCALE OR TUBE OR CYLIND#######) (3A) (CARBON OR C) L9 225475 SEA ABB=ON (CARBON OR C) (3A) (NANOTUB? OR FIBER OR FIBRE OR NANONEEDL? OR NANOROPE OR NANO ROPE OR NANOFIBER OR NANOFIBRE OR NANOFIBRIL? OR NANO FIBRIL? OR NANOBUNDLE OR NANO BUNDLE OR NANOTHREAD OR NANOFILAMENT OR NANO FILAMENT OR NANOSTRING OR NANO STRING 261 SEA ABB=ON (CARBON OR C) (2A) (NANOROD OR NANO ROD OR NANOPOLE 1.3.0 OR NANO POLE OR NANOWHISKER OR NANO WHISKER) 7145 SEA ABB=ON (D01F9-12)/IPC,IC 267440 SEA ABB=ON (L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR L11) Lll

348 SEA ABB=ON L12 AND (PHOTOELECTRIC DEVICES) L14 205 SEA ABB=ON L12 AND (PHOTOELECTRIC? OR PHOTO ELECTRIC) (2A) (CELL OR DEVICE OR APPARATUS OR APP##) 1.15 8 SEA ABB=ON L12 AND (PHOTOCELLS)

L16 37 SEA ABB-ON L12 AND (PHOTOCELL OR PHOTO CELL) 5 SEA ABB=ON L12 AND (CELLS, PHOTOELECTRIC) L18 13 SEA ABB=ON L12 AND (PHOTOELECTRIC CELLS) 619 15 SEA ABB=ON L12 AND (PHOTOCOND##############) (2A) (CELL) L20 0 SEA ABB=ON L12 AND (PHOTOCOND. CELLS)

L21 65 SEA ABB=ON L12 AND (PHOTOELECTRIC CELL) 4 SEA ABB=ON L12 AND (PHOTOTUBES) L23 20 SEA ABB=ON L12 AND (PHOTOTUBE OR PHOTO TUBE) 1.24

48 SEA ABB=ON L12 AND (PHOTOELECTRODES) 1.25 30 SEA ABB=ON L12 AND (PHOTOELECTRODE OR PHOTO ELECTRODE) L26 19 SEA ABB=ON L12 AND (PHOTOMULTIPLIERS)

L27 1039 SEA ABB=ON L12 AND (SOLAR CELLS) L28 1116 SEA ABB=ON L12 AND (SOLARCELL OR SOLAR CELL)

L29 49 SEA ABB=ON L12 AND (SOLAR COLLECTORS) L30 1205 SEA ABB=ON L12 AND (SOLARCELL OR SOLAR CELL OR SOLAR COLLECT##

OR SOLAR ACCUMULAT######) L31 59 SEA ABB=ON L12 AND (PHOTOELECTRIC DEVICES, SOLAR)

L32 5 SEA ABB=ON L12 AND (ELEC. CELLS) 12 SEA ABB=ON L12 AND (ELECTRIC CELLS) 1.33

L36

L34 30 SEA ABB=ON L12 AND (PHOTOELEC. SOLAR CELLS) L35 8 SEA ABB=ON L12 AND (PHOTOVOLTAIC SOLAR CELLS)

718 SEA ABB=ON L12 AND (PHOTOVOLTAIC OR PHOTO VOLTAIC?)

L37 14 SEA ABB=ON L12 AND (SOLAR BATTERIES) L38 5 SEA ABB=ON L12 AND (SOLAR GENERATORS)

L39 1116 SEA ABB=ON L12 AND (SOLAR CELL) 0 SEA ABB=ON L12 AND (SOLAR PHOTOCELLS) L41 0 SEA ABB=ON 112 AND (SOLAR PHOTOELEC. DEVICES)

1.42 4 SEA ABB=ON L12 AND (SOLAR PHOTOVOLTAIC CELLS) L43 0 SEA ABB=ON L12 AND (SOLAR PHOTOVOLTAIC DEVICES) 191 SEA ABB-ON L12 AND (PHOTOVOLTAIC DEVICES)

0 SEA ABB=ON L12 AND (SOLAR-CELL BATTERIES) L46 69 SEA ABB=ON L12 AND (HETEROJUNCTION SOLAR CELLS) 5.47 14 SEA ABB-ON L12 AND (PHOTOELECTROCHEMICAL SOLAR CELLS)

148 4 SEA ABB=ON L12 AND (SCHOTTKY SOLAR CELLS)

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433 SEA ABB=ON L12 AND (H01L31-042 OR H01L51-42)/IPC.IC
            533 SEA ABB=ON L12 AND (L03-E05B OR A12-E11B OR U12-A02A2Q OR U12-A02A4A)/MC
L51
           1354 SEA ABB=ON L12 AND (SOLAR) (2A) (CELL OR PHOTOELECTRIC? OR
                PHOTO ELECTRIC? OR PHOTOELEC## OR BATER#### OR COLLEC? OR
                ACCUMULAT? OR PHOTOVOLTAIC OR PHOTO VOLTAIC OR PHOTOCELL OR PHOTO CELL OR HETEROJUNCTION)
           1736 SEA ABB-ON L12 AND (CELL) (2A) (ELECTRIC? OF ELEC## OR PHOTOELEC
                TRIC? OR PHOTO ELECTRIC? OR PHOTOELEC## OR PHOTOVOLTAIC OR PHOTO VOLTAIC OR SOLAR!
             20 SEA ABB-ON L12 AND (PHOTOELECTRICIT######### OR PHOTO ELECTRICIT###########
             38 SEA ABB=ON L12 AND (PHOTOTRANSISTOR OR PHOTO TRANSISTOR)
           2962 SEA ABB=ON (L13 OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR
                L20 OR L21 OR L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28 OR
                L29 OR L30 OR L31 OR L32 OR L33 OR L34 OR L35 OR L36 OR L37 OR
                L38 OR L39 OR L40 OR L41 OR L42 OR L43 OR L44 OR L45 OR L46 OR
                L47 OR L48 OR L49 OR L50 OR L51 OR L52 OR L53 OR L54)
L56
           1486 SEA ABBHON 1.12 AND (BAND GAP)
            229 SEA ABB=ON L12 AND (BANDGAP)
            162 SEA ABB=ON L12 AND (BAND GAPS)
L58
1.59
           1676 SEA ABB=ON (L56 OR L57 OR L58)
L60
            158 SEA ABB=ON L59 AND (1EV OR 1 EV OR 0 EV OR 0EV OR 2EV OR 2 EV
                OR 3EV OR 3 EV OR 4 EV OR 4EV OR 5EV OR 5 EV OR 6EV OR 6 EV OR
                7EV OR 7 EV OR 8 EV OR 9EV OR 10EV OR 10 EV OR (1 0EV OR 1 0 EV))
1.61
             16 SEA ABB=ON L60 AND L55
            244 SEA ABB=ON L59 AND (ELECTRONVOLT OR ELECTRON VOLT OR EV)
L63
            17 SEA ABB=ON L62 AND L55
1.64
             19 SEA ABB=ON L61 OR L63
1.65
            14 SEA ABB=ON L64 AND P/DT
1.66
             5 SEA ABB=ON L64 NOT L65
L67
             0 SEA ABB=ON L66 NOT 2004-2010/PY
1.68
             6 SEA ABB=ON L65 AND 1980-2003/PRY.PY
L69
            14 SEA ABB=ON L65 AND 2004-2010/PRY.PY
L70
             O SEA ABB-ON L65 NOT L69
1.21
              6 SEA ARR-ON 1.70 OR 1.68
               D ALL MEMBB 1-6
L72
          1677 SEA ABB=ON L12 AND (BAND OR ENERGY OR VALENCE OR COULOMB) (2A) (GAP)
L73
            21 SEA ABB=ON L12 AND (ENERGY LEVEL, BAND STRUCTURE(L) GAP)
L74
            20 SEA ABB=ON L12 AND (COULOMB GAP)
L75
            627 SEA ABB=ON L12 AND (HOMO OR LUMO OR SUMO)
L76
             2 SEA ARB#ON L12 AND (ELECTRONIC ENERGY GAP)
            33 SEA ABB=ON L12 AND (ENERGY BAND GAP)
L78
            325 SEA ABB=ON L12 AND (ENERGY GAP)
1.79
           1708 SEA ABB=ON L12 AND (BAND) (2A) (STRUCTURE)
L80
            152 SEA ABB=ON L12 AND (BAND STRUCTURES)
1.81
           1069 SEA ABB=ON L12 AND (FERMI) (1A) (LEVEL)
L82
              9 SEA ABB=ON L12 AND (HIGHEST OR LOWEST) (W) (OCCUPIED) (W) (MOLECULAR ORBITAL)
1.63
            621 SEA ABB=ON L12 AND (HOMO OR LUMO OR SOMO)
T.R4
            299 SEA ABB=ON L12 AND (MOLECULAR ORBITAL(L) HOMO)
L85
            259 SEA ABB=ON L12 AND (MOLECULAR ORBITAL(L) LUMO)
              9 SEA ABB=ON L12 AND (HIGHEST OCCUPIED MOLECULAR ORBITAL)
1.86
1.87
              7 SEA ABB=ON L12 AND (DONOR LEVELS)
             6 SEA ABB=ON L12 AND (DONOR OR ACCEPTOR) (1A) (LEVEL)
1.88
L89
             11 SEA ABB=ON L12 AND (ACCEPTOR LEVELS)
L90
            291 SEA ABB=ON L12 AND (VALENCE BAND)
             10 SEA ABB=ON L12 AND (BAND OFFSET)
1.91
1.92
             12 SEA ABB=ON L12 AND (BAND) (2A) (OFFSET OR OFF-SET OR OFF SET)
1.93
            219 SEA ABB=ON L12 AND (CONDUCTION BAND)
L94
           4256 SEA ABB=ON (L72 OR L73 OR L74 OR L75 OR L76 OR L77 OR L78 OR
                L79 OR L80 OR L81 OR L82 OR L83 OR L84 OR L85 OR L86 OR L87 OR
                L88 OR L89 OR L90 OR L91 OR L92 OR L93)
L95
           4252 SEA ABB=ON L94 NOT L71
L96
            163 SEA ABBWON L95 AND (BANDGAP OR BAND GAP OR GAP OR BAND OR
                HOMO OR LUMO OR SOMO OR PERMI OR ENERGY GAP OR ENERGY LEVEL OR
                VALENCE) (5A) (ELECTRONVOLT OR EV)
L97
            439 SEA ABB=ON L95 AND (ELECTRONVOLT OR EV)
L98
            292 SEA ABB#ON L95 AND (1EV OR 1 EV OR 0 EV OR 0EV OR 2EV OR 2 EV
                OR 3EV OR 3 EV OR 4 EV OR 4EV OR 5EV OR 5 EV OR 6EV OR 6 EV OR
                7EV OR 7 EV OR 8 EV OR 9EV OR 10EV OR 10 EV OR (1 0EV OR 1 0 EV))
L99
             16 SEA ABB-ON L98 AND L55
            450 SEA ABB=ON (L96 OR L97 OR L98)
L101
             20 SEA ABB=ON L100 AND L55
            292 SEA ABB=ON L100 AND L98
            20 SEA ABB=ON L99 OR L101
1.104
           144 SEA ABB=ON L98 AND (BANDGAP OR BAND GAP OR BAND GAPS)
L105
            20 SEA ABB=ON L99 OR L101 OR L103
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20 SEA ABB=ON L105 NOT L71 1.106 L107 12 SEA ABB=ON L106 AND P/DT L108 8 SEA ABB=ON L106 NOT L107 L109 1 SEA ABB=ON L108 NOT 2004-2010/PY L110 2 SEA ABB=ON L107 AND 1980-2003/PRY, PY 12 SEA ABB=ON L107 AND 2004-2010/PRY, PY L112 0 SEA ABB=ON L107 NOT L111 1.113 3 SEA ABB=ON L112 OR L110 OR L109 D ALL MEMBB 1-3 L114 708 SEA ABB=ON L96 OR L97 OR L98 OR L10 OR L102 OR L104 L115 705 SEA ABB=ON L114 NOT (L113 OR L71) L116 38 SEA ABB=ON L115 AND L55 14 SEA ABB=ON L116 AND (BANDGAP OR BAND GAP OR BAND GAPS) 14 SEA ABB=ON L116 AND (ENERGY OR BAND) (1A) (GAP) Llis 292 SEA ABB=ON L115 AND (1EV OR 1 EV OR 0 EV OR 0EV OR 2EV OR 2 L119 EV OR 3EV OR 3 EV OR 4 EV OR 4EV OR 5EV OR 5 EV OR 6EV OR 6 EV OR 7EV OR 7 EV OR 8 EV OR 9EV OR 10EV OR 10 EV OR (1 0EV OR 1 0 EV)) L120 38 SEA ABB=ON (L116 OR L117 OR L118) L121 29 SEA ABBEON L120 AND P/DT L122 9 SEA ABB=ON L120 NOT L121 L123 0 SEA ABB=ON L122 NOT 2004-2010/PY 1.124 0 SEA ABB=ON L121 AND 1980-2003/PRY, PY L125 279 SEA ABB=ON L119 NOT L120 705 SEA ABB=ON L125 OR L115 L127 705 SEA ABB=ON L126 NOT (L113 OR L71) 1.129 667 SEA ABB=ON L127 NOT L120 L129 425 SEA ABB=ON L128 AND (ELECTRONVOLT? OR ELECTRON VOLT? OR EV) L130 279 SEA ABB=ON L128 AND (1EV OR 1 EV OR 0 EV OR 0EV OR 2EV OR 2 EV OR 3EV OR 3 EV OR 4 EV OR 4EV OR 5EV OR 5 EV OR 6EV OR 6 EV OR 7EV OR 7 EV OR 8 EV OR 9EV OR 10EV OR 10 EV OR (1 0EV OR 1 0 EV)) L131 434 SEA ABB=ON (L129 OR L130) L132 17 SEA ABB ON L131 AND P/DT 417 SEA ABB=ON L131 NOT L132 L134 125 SEA ABB=ON L133 NOT 2004-2010/PY L135 4 SEA ABB=ON L132 AND 1980-2003/PRY, PY L136 15 SEA ABB=ON L132 AND 2004-2010/PRY, PY 2 SEA ARR=ON L132 NOT L136 L138 129 SEA ABB=ON L137 OR L135 OR L134 D ALL 1-129